

A social influence interpretation of workplace ostracism and counterproductive work behavior

By: [Jun Yang](#) and Darren C. Treadway

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Abstract:

We used social network analysis to examine a theoretical model exploring why, and under what circumstances, the perpetrators' ostracizing behaviors are accurately perceived by the target employees. In turn, these perceptions of ostracism lead to the target employees' counterproductive work behaviors. Adopting perspectives from both perpetrators and targets, we directly measured the ostracizing behaviors by all potential perpetrators (coworkers) and perceived workplace ostracism by target employees. We integrate Social information processing theory and conservation of resource theory to propose a moderated mediation model, and found that employees who have a high level of need to belong are more likely to capture coworkers' ostracizing behaviors, and those with low political skill are more likely to engage in counterproductive work behavior as their reaction to perceived workplace ostracism. Theoretical and practical implications are discussed.

Keywords: workplace ostracism | counterproductive work behavior | need to belong | political skill | social information processing theory | conservation of resource theory | social network analysis

Article:

Ostracism is the extent to which an individual is ignored or excluded by others (Williams 2001). A series of studies in the fields of psychology, education, and sociology (Gruter and Masters 1986; Leary 2001; Twenge et al. 2001) have found that ostracism is a powerful, distinct, and regular occurrence in almost every walk of human life. Recent functional magnetic resonance imaging (fMRI) research has shown that ostracism is as painful to the target as is physical injury (Eisenberger et al. 2003). Thus, it is not surprising that when an individual experiences ostracism, he or she is likely to suffer from impaired cognitive function (Baumeister et al. 2005), increased psychological distress (Wu et al. 2012), and engage in self-defeating behaviors (Twenge et al. 2002) and aggression toward others (Twenge et al. 2001). These detrimental effects are also prevalent in the workplace.

Within the work environment, 66 % of employees in the United States experience ostracism within their work environment (Fox and Stallworth 2005). Ostracized employees are at the risk of deteriorated job performance, affective commitment, and work engagement, and increased intentions to quit (Ferris et al. 2008). Although previous research has found a general negative influence of workplace ostracism on employee outcomes (Balliet and Ferris 2013; Ferris et al. 2008; Leung et al. 2011; Liu et al. 2013; Scott et al. 2013; Wu et al. 2012), the question of how excluded employees cope with their feelings of being ostracized and reestablish the social connections with their colleagues is, as of yet, unexplored.

Being socially included is critical for an individual's well-being (Baumeister and Leary 1995). Building on cognitive appraisal theory (Lazarus and Folkman 1984), an effective reconnection process by ostracized employees starts with detecting perpetrators' intentional ostracizing behaviors (primary appraisal) to restraining aggressive reactions after feeling being ostracized (secondary appraisal and coping). Most research on ostracism has focused on the secondary appraisal stage and explored only the employees' reactions to perceived ostracism, ignoring the target's primary appraisal. However, evolutionary psychologists have suggested that capturing exclusionary behaviors by others in a social environment is critical for our human ancestors to survive (Williams 2001). Similarly, detecting coworkers' ostracizing behaviors is an important first step to rebuild social ties and be reaccepted to the group in the workplace.

Previous research has overlooked this issue. This may be due to the subtle nature of ostracism which makes distinguishing between intentional and unintentional ostracism difficult. Indeed, we agree with Robinson et al. (2013) who argued that ostracism perceptions could arise from both misinterpretations of either intentional or unintentional behaviors. However, it is intentional social exclusion that most prevents employees from performing effectively (Robinson et al. 2013), and engaging in from team work and knowledge sharing. Thus, our failure to address the antecedents of ostracism leaves us without a theoretical understanding explaining why perpetrators initiate such behaviors, leaving the practitioners without a clear rationale for how to prevent and eliminate such destructive behaviors.

It is both theoretically and practically important to investigate how others' ostracizing behaviors translate into employee perceptions of ostracism in the primary appraisal stage. Once discovered, it is then critical to understand the nature of employees' reactions to these appraisals in the subsequent secondary appraisal stage and in their coping mechanisms. At the primary appraisal stage, individuals are prone to make mistakes in perceiving their social relationships (Killworth and Bernard 1976). According to SIP theory (Salancik and Pfeffer 1978), employees selectively process information about their social environment and evaluate the environment based on their individual characteristics. Therefore, it is likely that employees may have different interpretations of others' behaviors. Among all workers, those with a higher level of need to belong persistently seek social inclusion and acceptance (Baumeister and Leary 1995; Pickett et al. 2004). Hence, it would be expected that those with high need to belong are more sensitive to developing perceptions of other's ostracizing behaviors. Congruently, we develop a model that proposes coworkers' ostracizing behaviors are more likely to lead to the target employee's perceptions of such behaviors when he or she has a higher level of need to belong.

At the secondary appraisal stage, ostracized employees begin to evaluate their resources to cope with the tension created by ostracism. The deprivation of control and resources resulting from being ostracized increases the likelihood of aggressive response (Warburton et al. 2006). According to Conservation of Resource (COR) theory, employees with high political skill are more likely to develop a sense of control and increase personal resources (Jawahar et al. 2007). Therefore, political skill may help employees to compensate for the loss of personal resources (Perrewé et al. 2000, 2004, 2005). Therefore, we argue that employees with high political skill are likely to suppress their aggression (counterproductive work behavior—CBW) when perceiving workplace ostracism.

Cumulatively, we specify and test a model grounded in theories of cognitive appraisal, social information processing (Salancik and Pfeffer 1978), and COR (Hobfoll 1989) that explains how perpetrators' intentional ostracizing behaviors are selectively perceived by employee targets and how these targets respond to their perceptions (Fig. 1). Cumulatively, this broader understanding may offer opportunities for both theories to be advanced and effective practical solutions to be developed.



Fig. 1. Theoretical model

As complement to the ostracism literature, we incorporate both perpetrators' and targets' perspectives in the interactive process of workplace ostracism (Hershcovis and Reich 2013), and directly examine the perpetrators' behaviors and the target's reactions in the same model. The current model allows us to capture the purposeful and intentional ostracizing behaviors, which is different from ostracism perception. By doing do, we clarified the behavioral antecedents of ostracism perception, and identified individual attributes that moderate this relationship. Accordingly, our study is among the earliest studies to test the presumed casual relation between perpetrators' ostracizing behaviors and targets' perceptions, and contribute to an interactive paradigm of workplace ostracism.

We also introduce need to belong as a conditional factor for employees' sensitivity to perpetrators' ostracizing behaviors, we identify the individual circumstance (need to belong) under which this proposed relationship is more likely to occur. Based on this model, we provide explanations why perpetrators' ostracizing behaviors only affect some targets, not everyone (Williams and Sommer 1997). Basically, we take a first step to capture the ambiguous causes of perceived workplace ostracism. Therefore, our model highlights the role of need to belong in the reconnection process of ostracized employees, and extends the need-fortifying theory of ostracism (Williams 2001).

Finally, our model contributes to political skill theory by extending the role of political skill in affecting employees' positive and negative reactions to the perceived workplace ostracism. In particular, political skill acts as a means to protect personal resources and increase control in employees' coping with ostracism perceptions. This expands the previous literature on political skill and stress. Previously, political skill is argued to be a personal resource to alleviate the strain reactions (e.g., Perrewé et al. 2004). However, political skill might have a more complex role in helping individuals cope with environmental challenges. The current study contends that people with political skill protect themselves from the further harm of workplace ostracism by engaging them in a resource-minimizing coping strategy. To summarize, our study brings much-needed attention to bridge (fill) the existing gap between ostracizing behaviors and how these behaviors are perceived, and identifies critical individual differences that affect employees' perceptions of these behaviors and subsequent behavioral responses.

Theory and Hypothesis

Workplace Ostracism: Objective Behaviors and Perceptions

Ostracism has been evident across cultures and throughout time. In ancient Greece, the word “ostrakimos” was used to describe the practice of removing those with dictatorial ambitions from the democratic state (Zippelius 1986). Similarly, the Amish uses the word “Meidung” to describe their practice of shunning members of their community as a means of deplaning deviants (Gruter 1986). “Meidung” is viewed as a “death” in social life because it demands the friends, family, and relatives not to talk to the victim (Gruter 1986).

In social psychology, ostracism has usually been framed as behaviors of excluding and ignoring an individual and happens implicitly without clear explanations or notices why the person is ostracized (Williams 2007). Thus, ostracism has a continuum of manifestations, ranging from the complete removal of an individual from the group to more subtle forms of ignorance and exclusion, such as lack of eye contact or verbal communication (Zadro 2003).

From these conceptualizations of ostracism, it is evident that ostracism is a relational phenomenon in nature, and involves at least two parties: perpetrators and targets (Williams 1997). Leary (2001) suggested that it is important to distinguish between objective ostracizing behaviors of others and the perception of ostracism. He noted that it is a critical omission that previous research failed to separate the two concepts and led to confusion with regard to how ostracism impacts individuals. In laboratory settings, perpetrators' ostracizing behaviors are often used as an immediate manipulation to create perceptions of being ostracized in the target participants' mind. In contrast, research on workplace ostracism has mostly limited to targets' perceptions and ignored perpetrators' ostracizing behaviors. This leaves our understanding of workplace ostracism with a critical question left unanswered: To what degree do coworkers' behaviors cause an employee to develop perceptions of ostracism at work? Although the correlation is likely, the actual mechanism remains unclear.

As an input of SIP, ostracism is one environmental stimuli to which individuals are sensitive. Even the slight ostracism inherent in a simple ball tossing game can cause the activation of brain area that relates to physical pain (Eisenberger et al. 2003). This reaction has been argued to be

critical for the survival of our ancient ancestors, and there are evolutionary advantages for them to capture the social cues of ostracism in order to regulate their own behaviors in order to reestablish inclusionary status (Zadro et al. 2004). Similarly, Ferris and co-workers (2008) suggested that people are attentive to coworkers' ostracizing behaviors likely due to the consequences of being ostracized (loss of the resources, protection, and mate access). While these arguments stem from laboratory findings, we suggest similar effects should be expected in the organizational context. Therefore, we propose:

Hypothesis 1 Coworkers' ostracizing behaviors will be positively related to an employee's perceived workplace ostracism.

We argue that the relationship between ostracizing behavior and a target's perception of said behavior while likely positive, is dependent on several individual considerations. A study by Boeckmann (2000) suggested that some individual characteristics might make individuals more susceptible to feel ostracized. In particular, Boeckmann (2000) found that individuals with insecure attachment styles were more likely to feel they were ostracized than those with secure attachment styles when others demonstrated the same ostracizing behaviors toward them. This finding raised doubt about whether the perceptions of workplace ostracism are solely based on other people's behaviors. It is likely that individual characteristics play an important role in determining the strength of relation between coworkers' ostracizing behaviors and an employee's perceived workplace ostracism. In the current study, we adopt a SIP perspective to explain how need to belong plays such a role.

Need to Belong

Need to belong is a fundamental human need, and a primary motivation many interpersonal relations (Baumeister and Leary 1995). According to belongingness theory (Baumeister and Leary 1995), human beings have "a pervasive drive to form and maintain at least a minimal quantity of lasting, positive, and significant interpersonal relationships" (p. 497). Thus, need to belong has been shown to serve as a powerful motivation of goal-directed behaviors. Previous studies have suggested that if an individual's need to belong is threatened, he or she is likely motivated to enhance their cognitive performance to demonstrate their value to the group and earn their way back into the group (Jamieson et al. 2010).

Need to belong also enhances an individual's favorability of social information (Gardner et al. 2000, 2005). Research has shown that people with high need to belong were more likely to show improvements on memory of social information and that individuals who are high in need to belong are more motivated to gain social reconnections than those who are low in need to belong (Gardner et al. 2000). Similarly, Pickett, Gardner, and Knowles (2004) examined the impact of the need to belong on sensitivity to social cues, and found that individuals high in the need to belong were more likely to identify vocal tone and facial emotion.

Individuals' social monitoring systems differ in their level of sensitivity (Pickett et al. 2004), and we propose that need to belong determines this sensitivity level. Specifically, employees with a high level of need to belong are motivated to constantly monitor their surrounding environment and make sure they are adequately fulfilling their need to belong (Baumeister and Leary 1995).

This makes these employees more susceptible to coworkers' ostracizing behaviors and in turn more likely to generate the perceptions of being ostracized. On the other hand, individuals with low need to belong, are less motivated to pay attention to their social environment, and are likely to ignore coworkers' ostracizing behaviors, or not interpret coworkers' behaviors as ostracism. Therefore, we propose the following hypothesis grounded in belongingness theory:

Hypothesis 2. Need to Belong moderates the relationship between ostracizing behaviors by others and a target's perceived workplace ostracism. Specifically, the relationship between coworkers' ostracizing behaviors and the target's perceived workplace ostracism will be stronger when the target has a high level of need to belong rather than when he or she has a low level of need to belong.

Counterproductive Work Behavior

A seemingly natural, although uninvestigated, consequence of perceptions of workplace ostracism is counterproductive work behavior (CWB). CWB are behaviors that are intentionally conducted by employees and harm an organization and its members (Spector and Fox 2002). Different labels have been used to describe CWB, such as workplace deviance (Lawrence and Robinson 2007; Robinson and Bennett 1995), bad behavior (Griffin and Lopez 2005), aggression (Douglas and Martinko 2001; Fox and Spector 1999) and antagonistic work behavior (Lehman and Simpson 1992). The current study uses the term "counterproductive work behavior" in order to keep consistency and eliminate confusion.

Previous research has shown that ostracism may lead to maladaptive behaviors, including self-defeating behavior and aggressive behaviors, because it damages individuals' self-regulation processes. Baumeister et al. (2005) found that ostracized participants were less likely to discipline themselves to have a healthy diet, persist in spite of frustrations, or perform a dichotic learning task. They suggested that failure of self-regulation was the cause of maladaptive behaviors related to ostracism. Consistent with this notion, Twenge and co-workers (2001) found that experiencing ostracism leads to aggressive behaviors. Specifically, they found excluded participants produced a more aversive noise toward others.

In sum, research has shown that ostracism results in negative effects on a series of individual outcomes, ranging from cognitive functions to aggressive behaviors. It seems that ostracized individuals are unable to correctly process social information, and make beneficial decisions for themselves. Moreover, the ostracized individuals experience psychological frustration from being ignored and excluded, and in turn, lose the ability to empathize with others, and demonstrate aggressive attitudes and behaviors toward others (Twenge et al. 2001). These reactions are likely due to individuals' motivation to fortify their threatened need (Williams 2009), and more specifically, to engage in aggressive behaviors can help individuals reestablish control/existence needs (Warburton et al. 2006).

In the organizational context, employees have been found to engage in CWB when they are faced with situations which they perceive as unfair (Fox et al. 2001), and interfere with their ability to perform and need to control (Penney and Spector 2005). Experiencing workplace ostracism one such stressful situation (Wu et al. 2012), and threatens individuals' control need

(Warburton et al. 2006). Therefore, it is reasonable to argue employees who perceive they are ostracized are likely to engage in counterproductive behaviors as their responses.

Hypothesis 3. An employee's perceived workplace ostracism will be positively related to his or her subsequent CWB.

As we proposed the relation between coworkers' ostracizing behaviors and the perceived workplace ostracism, and the relation between perceived workplace ostracism and CWB, these two relationships are in the support for a mediation relationship. Therefore, we hypothesize the following:

Hypothesis 4. An employee's perceived workplace ostracism will mediate the relationship between coworkers' ostracizing behaviors and his or her subsequent CWB.

Political Skill

COR theory (Hobfoll 1989, 2002) proposes that individuals strive to maintain and gain various resources. These resources include personal resources (e.g., self-esteem, feeling of achievement), energy resources (e.g., monetary resource, time), object resources (materials assets), and condition resource (organizational or societal status). Resources are "those entities that either are centrally valued in their own right (e.g., self-esteem, close attachments, health, and inner peace) or act as means to obtain centrally valued ends (e.g., money, social support, and credit)" (Hobfoll 2002, p. 307).

Ferris et al.'s (2007) conceptualization of political skill specifically examined political skill was directly through the lens of COR theory (Hobfoll 1989, 2002). Political skill as an ability to understand the environment and use such knowledge to accomplish personal and/or organizational goals, is a personal resource itself (Ferris et al. 2007). In addition, when there are external threats and challenges, political skill will be activated and serve as an internal resource that assists the acquisition of other resources in organization. This ability granted by political skill to secure valuable resources help politically skilled individuals develop a sense of control over these resources and interpersonal relationships.

As a social effectiveness construct, political skill, has been suggested to affect an employees' interpersonal control (Ferris et al. 2007; Perrewé et al. 2000, 2004). We argue that it is through this impact on control and confidence that political skill can diminish the harmful impact of workplace ostracism perceptions. Indeed, as an environmental stressor (Williams 2001), perceived ostracism affects employees' need to control (Williams 2009). Similarly, an individual's sense of control has been shown to neutralize aggressive responses to ostracism in a laboratory studies (Warburton et al. 2006).

Political skill can also increase individual's confidence. Because the politically skilled have abilities to understand other people and the external environment and are able to apply such knowledge to increase their interpersonal effectiveness, politically skilled individuals are likely to have a sense of interpersonal security and confidence. Therefore, they often develop a positive evaluation of themselves. Both sense of control and feeling of self-confidence and security

provide politically skilled individuals better coping with stress. In the face of environmental stressors, politically skilled managed to gain greater personal control and security, and thus more confident in coping with these stressors, and perceive them as less threatening (Ferris et al. 2007; Perrewé et al. 2000).

As politically skilled employees have a better access to valuable organizational resources and more confidence about their social ability, they are likely to make a more strategic decision to regain inclusionary status through suppressing their negative reactions (CWB). Thus, the current study proposes the following hypothesis from COR theory:

Hypothesis 5. Political skill will moderate the relationship between an employee's perceived ostracism and counterproductive work behaviors. Specifically, when an employee has a high level of political skill, the relationship between perceived ostracism and counterproductive work behaviors will be weaker than when an employee is low political skilled.

Taken together, the above arguments and hypotheses suggest an integrated model in which perceived workplace ostracism mediates the relationship between coworkers' ostracizing behaviors and the target's subsequent CWBs. Further, our comprehensive model specifies that need to belong moderates the relation between other ostracizing behavior and perceived workplace ostracism, and political skill moderates the relationship between perceived workplace ostracism. Therefore, it is likely that need to belong and political will moderate the strength of the mediator function of perceived workplace ostracism. This relation is called moderated mediation (Preacher et al. 2007). Based on previous hypotheses, we suggest the mediation effect of perceived workplace ostracism will be stronger when an employee has a higher level of need to belong and lower level of political skill. Therefore, we propose:

Hypothesis 6. The indirect relationship between coworkers' ostracizing behaviors and an employee's counterproductive work behaviors will be stronger when he or she has a high level of need to belong and low level of political skill than other situations.

Method

Sample and Procedures

The data were collected from a manufacturing company in China. The participants were mainly front-line workers. Two waves of data were collected. At time 1, 1407 surveys were distributed that contained measures of coworkers' ostracizing behaviors, need to belong, perceived workplace ostracism, political skill, and control variables. Surveys were delivered by the researcher to the place of employment and returned individually in a sealed envelope by employees to assure confidentiality. Three months later, the second wave of data was collected using the same procedure as in wave 1.

At Time 1, 336 usable surveys were returned, (82.5 % response rate). At Time 2, among 384 surveys distributed (23 employees from Time 1 left the company), 276 usable surveys were returned (71.8 % response rate). List-wise deletion of missing data in control and study variables

left us with a final sample of 156 individuals. The 156 participants consisted of 66 females (42.3 %) and 90 males (57.7 %), with an average age of 29.78 years (s.d. = 7.42).

Measures

Coworkers' Ostracizing Behaviors

A network-type measure of ostracizing behaviors was used. Each employee was asked to read a list of names of all the members in their department, and identify how often they have ostracized each person on a 6-point Likert scale, ranging from 1 = "Never" to 6 = "Daily." In order to calculate centrality of the actor, the Likert scale results were dichotomized into 1 (Likert points = 3–6) and 0 (Likert points = 1–2). In particular, we used the following instruction: "Please recall in the past time at your workplace, have you ever ostracize (ignore or exclude them) the following coworkers? Examples of ostracizing behaviors include not returning their greeting, avoiding eye contact, ignore them in the conversation, and etc." UCINET software (Borgatti et al. 2002) was used to calculate the centrality of ostracism networks. In particular, normalized in-degree centrality of ostracism was used because it best demonstrated how an individual is ostracized by everyone else in the workplace.

Perceived Workplace Ostracism ($\alpha = 0.85$)

The 10-item workplace ostracism scale was used to measure employees' perception of workplace ostracism (Ferris et al. 2008). Sample items included "Others at work treated you as if you weren't there," and "You noticed others would not look at you at work."

Political Skill ($\alpha = 0.91$)

The 18-item Political Skill Inventory (PSI) was used to assess employee political skill (Ferris et al. 2005). Sample items included "I always seem to instinctively know the right things to say and do to influence others," and "I am particularly good at sensing the motivations and hidden agendas of others."

Need to Belong ($\alpha = 0.73$)

Need to belong was measured with a 10-item scale developed by Leary et al. (2001). Sample items included "If other people don't seem to accept me, I don't let it bother me," and "I need to feel that there are people I can turn to in times of need."

CWB ($\alpha = 0.97$)

CWB was measured by a 10-item short version of Counterproductive Work Behavior Checklist (Spector et al. 2006), and was rated at Time 2. Sample item included "Purposely wasted your employer's materials/supplies." Employee reported how often they did the described behaviors on a 5-point Likert scale, ranging from 1 = "never," and 5 = "everyday."

Control Variables

Research by previous scholars has suggested that demographic and human capital variables may play important roles in job choice contexts (Hobler et al. 2009; Ng and Feldman 2010). As such, the current study used age, sex, network size, and position tenure as control variables. Means, standard deviations, and zero-order correlations of all the variables in the current studies are presented in Table 1.

Table 1. Descriptive statistics and Pearson correlation coefficients

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------------------------------------|-------|-------|--------|-------|-------|---------|--------|---------|---------|---------|---|
| 1. Age | 29.78 | 7.42 | – | | | | | | | | |
| 2. Sex ^a | 0.58 | 0.50 | 0.15 | – | | | | | | | |
| 3. Position tenure | 3.26 | 3.51 | 0.47** | 0.19* | – | | | | | | |
| 4. Network size | 48.34 | 28.22 | –0.20* | 0.13 | –0.15 | – | | | | | |
| 5. Coworkers' ostracizing behaviors | 3.16 | 4.62 | 0.03 | 0.19* | 0.02 | –0.52** | – | | | | |
| 6. Need to belong | 4.70 | 0.82 | –0.19* | 0.04 | 0.09 | 0.05 | 0.01 | – | | | |
| 7. Perceived workplace ostracism | 1.70 | 0.55 | 0.10 | 0.16* | 0.05 | 0.06 | 0.05 | –0.24** | – | | |
| 8. Political skill | 4.67 | 0.85 | 0.05 | 0.09 | 0.03 | 0.06 | 0.02 | 0.24** | –0.34** | – | |
| 9. Counterproductive work behavior | 1.36 | 0.38 | 0.08 | 0.11 | 0.04 | 0.08 | –0.22* | 0.12 | 0.48** | –0.33** | – |

Female is coded as 0, and male is 1

** $p < 0.01$; * $p < 0.05$

^a $n = 156$

Results

Means, standard deviations, and zero-order correlations for the study variables are presented in Table 1. All of the study variables are associated in the direction expected. For example, ostracism perception is positively correlated with counterproductive work behavior, and political skill is negatively correlated with it. In addition, need to belong is negatively correlated with ostracism perception.

Moderation and Mediation Testing

We used hierarchical multiple regression analysis to test Hypotheses 1, 2, 3, 4, and 5. We entered control variables, independent variable (coworkers' ostracizing behaviors), first moderator (need to belong), first interaction term (coworkers' ostracizing behaviors \times need to belong), mediator (perceived workplace ostracism), second moderator (political skill), second interaction term (perceived workplace ostracism \times political skill) on separate steps, and all interaction variables were mean centered.

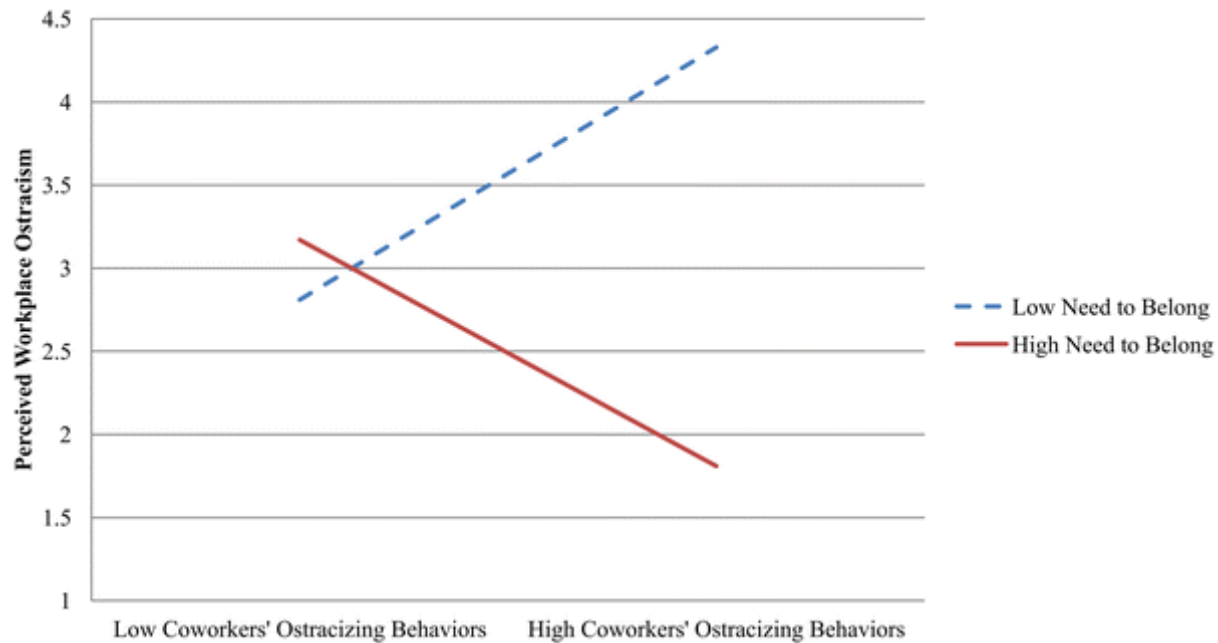
Hypothesis 1 predicts that coworkers' ostracizing behaviors is positively related to the target employee's perceived workplace ostracism. The results showed that coworkers' ostracizing behaviors are not associated with the victim's perceived workplace ostracism ($\beta = 0.01$, n.s., Model 2 in Table 2). Therefore, Hypothesis 1 was not supported.

Table 2. Results of hierarchical regression analysis for perceived workplace ostracism

| Variables | Perceived workplace ostracism | | | |
|---|-------------------------------|--------------------|--------------------|--------------------|
| | Model 1 β | Model 2 β | Model 3 β | Model 4 β |
| Control | | | | |
| Network size | -0.13 | -0.14 | -0.09 | -0.14 |
| Position tenure | -0.01 | -0.01 | -0.02 | -0.07 |
| Age | 0.07 | 0.08 | 0.03 | 0.16 |
| Sex | 0.21 | 0.21 | 0.22 | 0.17 |
| Independent | | | | |
| Coworkers' ostracizing behaviors (<i>A</i>) | | -0.02 | 0.00 | 0.01 |
| Moderator | | | | |
| Need to belong (<i>B</i>) | | | -0.23** | -0.35** |
| Interaction | | | | |
| <i>A</i> × <i>B</i> | | | | 0.22* |
| R^2 | 0.04 | 0.04 | 0.09** | 0.12* |
| ΔR^2 | 0.04 | 0.00 | 0.05** | 0.03* |
| F | 1.46 | 1.16 | 2.42** | 2.79* |
| ΔF | 1.46 | 0.02 | 8.41** | 4.64* |

All tests are two tailed tests, $n = 156$

** $p < 0.01$; * $p < 0.05$

**Fig. 2.** Moderating effect of need to belong on the relation between coworkers' ostracizing behaviors and perceived workplace ostracism

Hypothesis 2 predicts that need to belong moderates the relationship between coworkers' ostracizing behavior and the targets' perceived ostracism. As shown in Table 2, the interaction between coworkers' ostracizing behaviors and need to belong was positively related to ostracism perception ($\beta = 0.22$, $p < 0.05$, Model 4 in Table 2). We then plotted the interaction effects using Aiken et al. (1991) procedure, computing slopes one standard deviation above and below the

mean of need to belong in Fig. 2. In specific, coworkers' ostracizing behaviors is positively related to employees' perceived workplace ostracism when their need to belong level is high ($\beta = 0.19, p < 0.01$), and is negatively related to employees' perceived workplace ostracism ($\beta = -0.17, p < 0.05$). We can see that employees with high need to belong experience higher level of perceived ostracism as coworkers' ostracizing behaviors increase, while for employees with low need to belong, their perceived workplace ostracism is negatively affected co-workers' ostracizing behaviors. Therefore, Hypothesis 2 was supported.

Hypothesis 3 predicts that perceived workplace ostracism will be positively related to his or her subsequent CWBs, and it was supported ($\beta = 0.12, p < 0.01$, Model 5 in Table 3). However, we did not find support for Hypothesis 1, which predicts coworkers' ostracizing behaviors are positively related to the employees' perceived workplace ostracism. Taking together the results of Hypothesis 1 and Hypothesis 3, the mediation hypothesis of H4 was not supported.

Table 3. Results of hierarchical regression analysis for counterproductive work behavior

| Variables | Counterproductive work behavior | | | | | | |
|--------------------------------------|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
| | β | β | β | β | β | β | β |
| Control | | | | | | | |
| Network size | 0.24** | 0.26** | 0.26** | 0.25** | 0.27** | 0.27** | 0.27** |
| Position tenure | -0.07 | -0.06 | -0.06 | -0.07 | -0.06 | -0.06 | -0.06 |
| Age | 0.69** | 0.67** | 0.66** | 0.69** | 0.67** | 0.66** | 0.64** |
| Sex | 0.12** | 0.11* | 0.11* | 0.10* | 0.08 | 0.09* | 0.08 |
| Independent | | | | | | | |
| Coworkers' ostracizing behaviors (A) | | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| First moderator | | | | | | | |
| Need to belong (B) | | | -0.01 | -0.03 | 0.01 | 0.01 | 0.01 |
| First interaction | | | | | | | |
| A \times B | | | | 0.04 | 0.02 | 0.03 | 0.03 |
| Mediator | | | | | | | |
| Perceived workplace ostracism (C) | | | | | 0.12** | 0.10** | 0.09** |
| Second moderator | | | | | | | |
| Political Skill (D) | | | | | | -0.07* | -0.06* |
| Second interaction | | | | | | | |
| C \times D | | | | | | | -0.07* |
| R^2 | 0.894** | 0.894** | 0.894** | 0.895** | 0.908** | 0.911** | 0.915** |
| ΔR^2 | 0.894** | 0.001 | 0.000 | 0.001 | 0.012** | 0.004* | 0.004* |
| F | 316.718** | 253.243** | 209.761** | 180.799** | 180.640** | 166.702** | 156.361** |
| ΔF | 316.718** | 0.824 | 0.084 | 1.638 | 19.691** | 6.005* | 6.524* |

** $p < 0.01$; * $p < 0.05$ All tests are two tailed tests. $n = 156$

Hypothesis 5 predicts that political skill will mitigate the relation between perceived workplace ostracism and subsequent CWB. Results showed that the interaction between perceived workplace ostracism and political skill was negatively correlated with CWB ($\beta = -0.07, p < 0.01$, Model 7 in Table 3). Simple slope analysis was conducted following Aiken and Wests procedure (1991) with one standard deviation above and below the mean of the moderator, and the results are depicted in Fig. 3. Specifically, perceived workplace ostracism is positively associated with

employees' subsequent CWB ($\beta = 0.41, p < 0.001$) when their political skill level is low, and this relation is not significant for employees with high political skill ($\beta = 0.13, n.s.$).

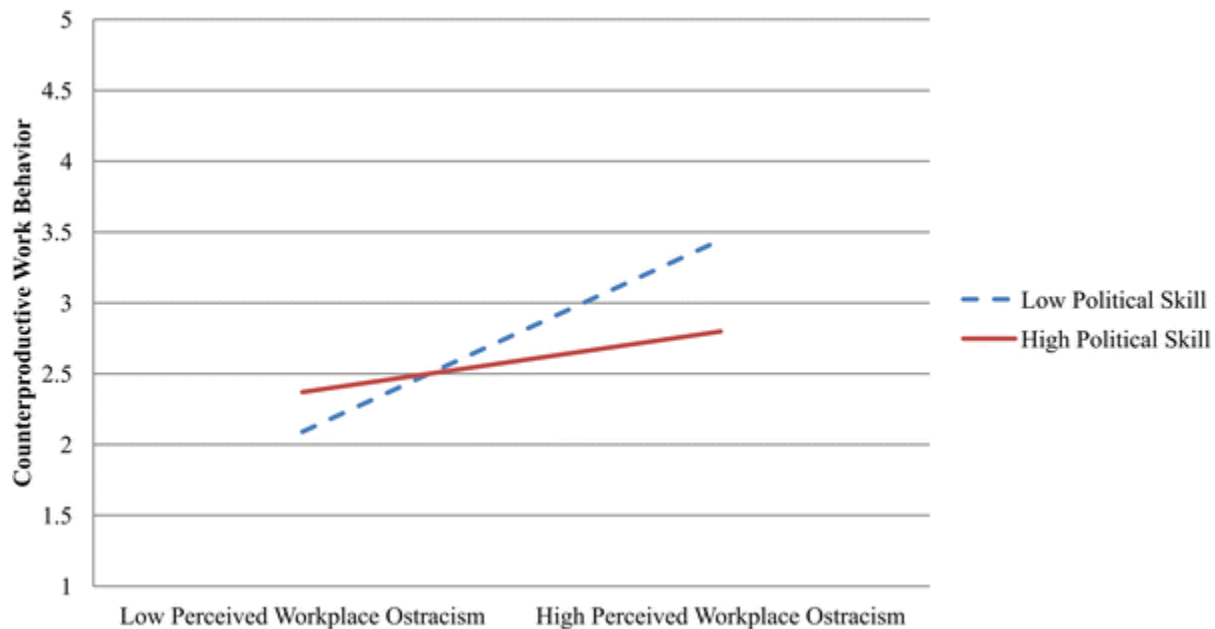


Fig. 3. Moderating effect of political skill on the relation between perceived workplace ostracism and counterproductive work behavior

Moderated Mediation Testing

We used Hayes's Process approach to test the indirect relationship of Hypothesis 6 (e.g., Hayes et al. 2011). According to Preacher and Hayes (2004), this approach is recommended because it is a direct test of indirect relationships. The current study conducted bootstrapping analysis. Bootstrapping is a resampling strategy for data analysis (Preacher and Hayes 2004). When bootstrapping is conducted, the real sample is viewed as a pseudo-population from which the sample was obtained, and the statistics of interest are calculated from the sample distribution of multiple resamples of the real dataset. These analyses were conducted by the macro "PROCESS" provided in Hayes' book (2013). The model is 21.

Hypothesis 6 is a moderated mediation hypothesis with two moderators. It needs to test whether the indirect effect of coworkers' ostracizing behaviors on an employee's subsequent CWB depends on the employee's need to belong and political skill levels. We choose the macro "PROCESS" to test this moderated mediation, because it can test two moderators at two separate stages simultaneously. In the conditional effect section of Table 4, the indirect effect of coworkers' ostracizing behaviors on an employee's counterproductive behavior was significant only for those with a high level of need to belong and low-to-average level of political skill, with the 95 % confidence intervals computed using bootstrap estimates excluding zero. Therefore, Hypothesis 6 was supported.

Table 4. Regression results for moderated mediation analysis ($n = 156$, Model 21)

| Mediator variable model (perceived workplace ostracism as DV) | | | | | |
|---|-----------------|-----------------|----------|-----------|-----------|
| Predictor | <i>B</i> | SE | <i>t</i> | <i>p</i> | |
| Coworkers' ostracizing behaviors (<i>A</i>) | 0.01 | 0.01 | 0.47 | 0.64 | |
| Need to belong (<i>B</i>) | −0.15 | 0.05 | −2.77 | 0.01 | |
| <i>A</i> × <i>B</i> | 0.03 | 0.01 | 2.23 | 0.03 | |
| Network size | 0.00 | 0.00 | −0.31 | 0.76 | |
| Age | 0.01 | 0.01 | 1.01 | 0.31 | |
| Sex | 0.13 | 0.09 | 1.39 | 0.17 | |
| Position tenure | −0.01 | 0.01 | −0.70 | 0.48 | |
| <i>R</i> ² | 0.11* | | | | |
| <i>F</i> | 2.65* | | | | |
| Dependent variable model (CWB as DV) | | | | | |
| Predictor | <i>B</i> | SE | <i>z</i> | <i>p</i> | |
| Perceived workplace ostracism (<i>C</i>) | 0.26 | 0.05 | 5.26 | 0.00 | |
| Coworkers' ostracizing behaviors | −0.02 | 0.01 | −3.58 | 0.00 | |
| Political skill (<i>D</i>) | −0.09 | 0.03 | −2.71 | 0.01 | |
| <i>C</i> × <i>D</i> | −0.16 | 0.07 | −2.51 | 0.01 | |
| Network size | 0.00 | 0.00 | −0.58 | 0.56 | |
| Age | −0.01 | 0.00 | −2.03 | 0.04 | |
| Sex | 0.10 | 0.05 | 1.80 | 0.07 | |
| Position tenure | 0.00 | 0.01 | −0.37 | 0.71 | |
| <i>R</i> ² | 0.37** | | | | |
| <i>F</i> | 10.90** | | | | |
| Conditional effects at political skill and need to belong = mean and ± 1 SD | | | | | |
| Need to belong | Political skill | Indirect effect | Boot SE | Boot LLCI | Boot ULCI |
| −0.82 | −0.86 | −0.01 | 0.008 | −0.025 | 0.005 |
| −0.82 | 0.00 | 0.00 | 0.005 | −0.017 | 0.003 |
| −0.82 | −0.86 | 0.00 | 0.003 | −0.012 | 0.002 |
| 0.00 | −0.86 | 0.00 | 0.005 | −0.008 | 0.011 |
| 0.00 | 0.00 | 0.00 | 0.003 | −0.005 | 0.009 |
| 0.00 | 0.86 | 0.00 | 0.002 | −0.002 | 0.007 |
| 0.82 | −0.86 | 0.01 | 0.006 | 0.001 | 0.027 |
| 0.82 | 0.00 | 0.01 | 0.004 | 0.000 | 0.018 |
| 0.82 | 0.86 | 0.00 | 0.004 | −0.001 | 0.015 |

** $p < 0.01$; * $p < 0.05$

Discussion

In the present study, we proposed a new model of ostracism in the workplace. In particular, our model focused on the difference between coworkers' objective ostracizing behaviors and the target's perception of such behaviors, and in turn, how it affects their consequent response to that perception. In this model, we used two individual differences: need to belong and political skill, in order to set boundary conditions for such a relationship. Our hypotheses were supported and have clear and important implications for both theory and practice.

Theoretical Implications

We make several theoretical contributions to the growing body of research on workplace ostracism. First, our study contributes to the organizational science's understanding of the perpetrator-target dynamics of the workplace ostracism process as the initial effort to directly measure perpetrators' ostracizing behaviors. Unlike other forms of workplace deviance, an important characteristic of workplace ostracism is its ambiguity. As such, it can easily be misperceived or misattributed. Previous studies on ostracism in the organizational context have focused solely on the target's perceptions. Our results suggested (particularly Hypothesis 1 and Hypothesis 2) that perceptions of being ostracized were only marginally related to the actual intended ostracizing behavior, before accounting for individual differences (i.e., need to belong). This is of particular value if we reflect on previous findings and theoretical arguments of workplace ostracism. It would appear that employee's perceptions of workplace ostracism are more strongly dependent on their own personal differences rather than the objective behaviors of the ostracizing party. To be noted, our study is among the first few ones to explore the discrepancy between the ostracism perpetrators' motives and the perceptions of the targets. In order to distinguish how motives of ostracism could be interpreted or misinterpreted by ostracized individuals, we have deliberately designed our study to capture the actual intended ostracizing behaviors and the perceptions of being ostracized. By doing so, we attempt to "systematically examine the frequency of actual ostracism motives and perceived motives in organizations, as well as the factors that can lead to discrepancies between the two" (Robinson et al. 2013, p. 210).

Our second contribution relates directly to the nature of these individual differences. Particularly, we contribute to belongingness theory (Baumeister and Leary 1995) and identify need to belong, as a motivational mechanism for employees to scan their work environment and search for behavioral cues if they are at risk of being ostracized. Logically, by investing greater resources toward coworkers' ostracizing behaviors, employees with a high level of need to belong develop a more consistent perception of coworkers' objective behaviors.

While the need to belong has been conceptualized as a fundamental human need (Baumeister and Leary 1995), individuals differ in their levels of this need (Leary et al. 2001). These individual differences lead to disparate interpretations to the same social interaction experience: in our case, the ostracizing behaviors by others. Employees who have a high need to belong are more likely to capture ostracizing behaviors which threaten their need to belong. Therefore, for those employees with high need to belong, their perceptions of being ostracized are based on facts, whereas for those with low need to belong, their perceptions of being ostracized are less likely to result from coworkers' behaviors.

A final contribution to the ostracism literature relates to our presentation of an integrative framework to understand how coworkers' ostracizing behaviors lead to the target CWBs. The current study conceptualizes workplace ostracism as a self-regulatory process and identifies two stages: first, interpretations of coworkers' behaviors (coworkers' ostracizing behaviors → perceived workplace ostracism), and second, the response to that perception (perceived workplace ostracism → CWBs). Each stage is moderated by an individual difference. Need to belong enhances employees' sensitivity to social cues about their risk of being excluded, and strengthens the relation at the first stage. Need to belong enables the individuals to constantly scan the social environment, interpret the social information, and give meanings of

coworkers' behaviors. Political skill adjusts employees' aggressive reactions once they generate the perceptions of being ostracized. Therefore, need to belong and political skill each separately impacts the two stages of ostracism process. Only for those individuals with a high level of need to belong and a low level of political skill, the perceived workplace ostracism mediates the relationship between coworkers' ostracizing behaviors and the subsequent CWBs.

Practical Implications

In considering the practical implications of our findings, we note that managers should carefully examine the situations when employees report they are ostracized. By separating the actual behaviors and the perception of it, manager can precisely identify the causes of ostracism in the workplace and develop a customized employee-assistance program to help them cope with it. As we suggested, objective ostracizing behavior is barely related to the perception of it, and thus, we suggested that manager identifies whether the acclaimed ostracism is due to actual behavior. In addition, it is also important to acknowledge that employees may perceive ostracism even from unintended behaviors by their coworkers. Therefore, an employee-assistance program that targets at effective communication is critical to reduce such misunderstanding. For example, employees could receive trainings about how to use appropriate body language and taking different perspectives when communicating, and in turn, to eliminate the risk of being perceived of conducting ostracizing behaviors.

In addition, we found employees with specific characteristics (high need to belong and low political skill) responded to coworkers' ostracizing with CWB via the path of perceptions of such behaviors. Therefore, managers trying to help employees who experience ostracism need to provide an individualized plan based on employees' level of need to belong and political skill. To the degree that political skill can be developed (Ferris et al. 2005), employee development based on political skill will be effective in managing CWB.

Strengths and Limitations

The current study has several strengths. First, this is the first study that used the social network approach to measure objective ostracizing behaviors. This method helps us capture the behavioral antecedents of workplace ostracism. In addition, the social network approach allows us to measure ostracizing behaviors from every possible source in an employee's work context, and thus diminish the risk of common method variance biases. Secondly, the study separated the objective behavior and the perceptions of it, therefore, lead to an accurate theorizing of workplace ostracism phenomenon. Third, by examining a mediational model, our study has examined a complete process from perpetrators' ostracizing behaviors to the victims' perception and their subsequent behavioral responses. This process model provides an overview of the how ostracism develops and affects workplace.

As all coins have two sides, the current study inevitably has its limitations as well. One limitation is that outcome of CWB was self-reported. Even though with a time lag, the self-report nature of counterproductive behavior could be confounded with social desirability. However, Berry et al.'s meta-analysis on CWB (Berry et al. 2012) supported the use of self-reports of CWB due to three reasons: convergence between self and other reports, small differences in correlations of self

versus other reports of CWB with job stressors and personality, and employees do not under-report their CWB compared to other sources. In addition, it has also been argued that self-report data is the most appropriate for assessing workplace deviance (Aquino and Douglas 2003). Thus, self-report seems to be the most appropriate for CWB in our study.

Another limitation is our focus on how coworkers' ostracizing behaviors lead to the perception of it, and in turn, affects employees' counterproductive behavior. Absent from our consideration is an evaluation of the perpetrators' motivation in choosing ostracism among many other forms of aggressive behaviors. Future studies are necessary to establish the individual and relational drivers of ostracizing behavior. Such studies would benefit greatly from the direct measure of ostracism used in this study. In particular, we have used a Chinese sample to test our model, and it is interesting to explore in the future studies if employees in collective culture are more or less likely to ostracize or feel ostracized. According to Liu et al. (2009), Chinese employees tend to have strong personal ties, and maintaining close relationship with others at work signals career success for them. Therefore, it is likely that Chinese employees may be more affected by others' ostracizing behaviors, and may be more cautious to conduct or report ostracizing behaviors toward others.

The last limitation is that we focused on intended ostracizing behaviors conducted by coworkers, and it is also possible that employees may develop their perceptions of being ostracized by others' unintended behaviors. The evaluation of unintended behaviors is very subjective and can hardly be captured from a perpetrators' perspective. Our study is a first step to examine the actual ostracizing behaviors, focusing on the intended behaviors, and we believe it is important and necessary to study the unintended ostracizing behaviors in the future studies with different approaches, such as field and laboratory experiments, in order to provide better control over the external environment.

Conclusion

The current study suggested a moderated mediation model of workplace ostracism. Specifically, we found that when others at work conduct ostracizing behaviors, the target employees with a high need to belong were more likely to generate perceptions of being ostracized, and those with a low political skill, more likely to react with CWBs. These findings contribute theoretically to organizational study on workplace ostracism and belongingness theory, and provide practical suggestions for managers and professionals.

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